In re Appln. of Smith Corres. to Int'l. Application No. PCT/GB00/01431

## ABSTRACT OF THE DISCLOSURE

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An apparatus for measuring decay in intensity of electromagnetic radiation passing through a radiation-absorbent sample due to absorption of radiation by the sample is disclosed which includes a source of electromagnetic radiation having a wavelength within an absorption band of the sample and a plurality of partially-reflective specular surfaces which are spaced apart from each other along a predetermined path through the sample, each specular surface separating the incident radiation into a reflected part which follows the predetermined path and an unreflected path, the value of the decay being derived from intensity measurements of the unreflected parts made at different positions along the predetermined path.